

REMARKS

In response to the Office Action dated September 7, 2004 in this case, we have amended our claims to correspond exactly in scope to those currently pending in Owens Corning U.S. Patent Application Serial No. 09/871,467.<sup>1</sup> As the Examiner will recall, this case was filed by Rohm and Haas to claim priority to and possibly provoke an interference with the '467 application because there is an inventorship dispute between the companies. We amended our claims in this case not because we believe they are necessarily patentable over the prior art (the Section 102(f) rejection is a distinctly different matter that we traverse below). We simply want to preserve Rohm and Haas' rights in those claims to the extent the Examiner later finds that they are indeed patentable over the art notwithstanding her rejection of such claims in the Office Actions dated September 7, 2004 in the parent '467 application and in this case. We also thank the Examiner for considering the art we cited, and applying that art carefully against the previously pending claims in our case and the pending claims in its parent.

I. Section 112 Issues Involving These Amended Claims

As for patentability of these amended claims, while reserving our rights to argue to the contrary in the event that patentability is found later, and with the exception of the Section 102(f) rejection, we don't currently disagree with the Examiner's position in the recent '467 Office Action as far as it goes. However, we do not believe it went far enough. Many of those claims should also have been rejected under 35 U.S.C §112. Indeed, we do not understand the claims, and it is not possible to compare them accurately to the prior art. In the discussion that follows, we refer by number to the claims pending in the '467 *parent* application.<sup>2</sup>

The considerable problem we have in these regards is that Owens Corning's parent claims 1, 4, 12, 18, 19, 21- 23 and 27 – 29 define a baseline below which the claimed binder must fall, the baseline being that the "surface tension [of the claimed binder is]... less than the surface tension of an equivalent weight percent solids *phenolic binder*" (Emphasis added). As explained below, there is a plethora of possible phenolic

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<sup>1</sup> We also made the correction to the specification adding the priority claim as requested by the Examiner.

<sup>2</sup> Claims 1-10 (as amended) in this case are copies of claims 1-10 pending in the parent case. Claims 11-28 (as amended) in this case are copies of claims 12-29 pending in the parent case

binder compositions with various viscosities (viscosity is related to surface tension). The problem we have is that the claims themselves do not define which of the many possible "phenolic binders" we should use as our baseline.

We examined the specification to ascertain whether it gave us any guidance as to which phenolic binder baseline to use, and the only reference we found was to a "traditional phenolic binder" (see page 8, lines 8-9), with no other description of its composition. Hardly any guidance there.

Our problem was exacerbated when we looked to the literature as to what the terms "traditional phenolic binder" or "phenolic binder" might mean. Our difficulty started with the definition of "phenolic" itself. Webster's (Exhibit A) defines "phenolic" as "of, relating to, or having the characteristics of a phenol." "Phenol" is defined in the Condensed Chemical Dictionary (Exhibit B) as:

*a class of aromatic organic compounds* in which one or more hydroxy groups are attached directly to the benzene ring. Examples are phenol itself (benzophenol), the cresols, xylenoids, resorcinol, naphthols . . . (Emphasis added).

The specification provides us no guidance as to which member of this large class of phenolics to use in the polymer contained in our "phenolic binder" baseline.

Confusion further proliferated when we searched for "phenolic binder." The closest definition we could find in the literature was for "phenolic resin" which the Condensed Chemical Dictionary (Exhibit B) advised us included:

[a]ny of the several types of synthetic thermosetting resin obtained by the condensation of phenol or substituted phenols with aldehydes such as formaldehyde, acetaldehyde, and furfural.

It should be apparent that the term "phenolic binder" in the offending claims embraces a large number of binders that can contain different types of copolymers made from varying ratios of co-monomers and with a wide range of possible molecular weights (all of which can result in different surface tensions/viscosities). We are at a loss to understand which one is intended to be our baseline in the offending claims.

Interestingly, we learned from the art that some phenolic binders contain viscosity-altering surfactants (see, e.g. Owens Corning U.S. Patents Nos. 4,956,409 and 4,595,443). So does our phenolic binder baseline contain a surfactant or not, and if so,

how much? Also, as we have already demonstrated in this prosecution, phenolic binders invariably contain various amounts and types of dust-suppression oils that can affect viscosity in various ways. So what type and level, if any, of dust-suppression oil should be in our baseline material?

Some phenolic binders also contain urea (see, e.g., U.S. Patents Nos. 5,916,966, 6,245,438, and 6,379,814). Others contain melamine (see, e.g., U.S. Patent No. 5,916,966). These additional permutations layer even more uncertainty on the meaning of "phenolic binder."

As further evidence that this is a real problem, not just attorney argument, we did a brief search on Yahoo.com for "phenolic resin" and "viscosity" (Exhibit C) and we found a range of viscosities from "low" to "high" (viscosity is related to surface tension per the offending claim language.)

Thus, the offending parent claims 1, 4, 12, 18, 19, 21- 23 and 27 – 29 should be rejected as being indefinite for all these various reasons under Section 112 because they all contain expressly or by dependency the un-defined term "phenolic binder."

We would hope that the Examiner would bear in mind that claims such as dependent parent claims 21-23 and 27-29 that contain numerical surface tension values below which the claimed composition must fall do not eliminate this lack of clarity by reciting numbers. That's because – by virtue of the dependency of these dependent claims on independent claims reciting a "phenolic binder baseline" – the surface tensions of the claimed compositions in these dependent claims must also fall below that of a "phenolic binder" of undisclosed composition. We submit that in light of the information we have provided above that the surface tensions of some phenolic binders can fall below the numerical values in parent claims 21-23 and 27-29. We believe it is unclear how much lower those lower surface tensions might be. Thus, parent claims 21-23 and 27-29 are still unclear because we still do not know whether the numerical values recited in those claims or some lower surface tension values of some undefined phenolic binders control how those claims are to be interpreted.

The parent claims 1, 4, 12, 18, 19, 21- 23 and 27 – 29 are unpatentable under section 112.

II. Comments On Owen's Corning's Patentability Argument Over Reck

a. Owens Corning's Argument in a Nutshell

In its June 3, 2004 Response to the January 7, 2004 Office Action in the parent '467 application, Owens Corning's 10 pages of patentability argument over Reck boils down to one simple proposition: Owens Corning states (without factual support) that Reck does not disclose a low viscosity binder. "Low" is, of course, expressed in several ways depending on the claim in question (i.e., lower than "phenolic binder[s]" or lower than one of several different numerical values).

b. Relevant Industry Background Relating to Unpatenability

In determining patentability of the subject matter Owens Corning is trying to claim, the Examiner should understand the reason why the fiberglass insulation industry is interested in polycarboxy polymer binders: that industry might want to replace phenol-formaldehyde based binders for health or market perception reasons. Formaldehyde has long been suspected as a carcinogen. Polycarboxy polymers of the types in question in this case are not known to be carcinogenic.

Rohm and Haas has been selling polycarboxy polymers for years. When Rohm and Haas has approached various insulation manufacturers – Owens Corning included – to sell such binders the common refrain from such manufacturers that they want to use their existing equipment (e.g., binder spray nozzles and pumping equipment) as much as possible if they convert to a new non-formaldehyde binder. Since we're simply talking about spraying a different polymer solution using existing spray equipment, the obvious thing to do is to make sure that the viscosity is no greater and preferably less than the viscosity of the prior polymer solution. So, when we suggested to Owens Corning (prior to the parent filing date) that they use a surfactant in our polymer system,<sup>3</sup> we suggested the simple expedient – add a surfactant -- that one skilled in the art would ordinarily do in avoiding having to make expensive equipment (nozzles, pumps, lines) changes.

So, when Reck – or Hummerich for that matter – advises those skilled in the art to add a surfactant, it does not take much imagination for one skilled in the art to understand why that advice was provided, and to realize that the best way of accomplishing that is to

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<sup>3</sup> Note that the specification of the parent and this application states that the polycarboxy polymers used in the examples came from the Rohm and Haas Company (see, e.g., page 1, lines 14-15, page 7 line 22; and page 8 line 6).

aim for the kind of viscosity that Owens Corning is trying to describe in the pending claims.

c. **Owens Corning's Argument Against Reck Lacks Supporting Facts to Refute A Section 102 Inherency Rejection Over Reck (or Hummerich) and Allowance of the Pending Claims Would Be Contrary to the MPEP**

In relation to its argument that Reck does not disclose low viscosity binders, Owens Corning provided no *evidence* of that. Corning relies only on attorney argument, which is not factual evidence of what that prior art *inherently* does or does not disclose. It is one thing simply to argue that a reference does not inherently disclose, but it's an entirely different matter to prove it.

It is well settled that one cannot patent an undisclosed property – in this case surface tension – of a composition otherwise old in the art. M.P.E.P. 2112(I) citing *Atlas Powder Co. v. IRECO Inc.*, 190 F3d 1342 (Federal Circuit 1999). Thus, the claiming of a new use, new function or unknown property which is inherently present in the prior art does not make the claim patentable. M.P.E.P. 2112(I) citing *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). Where the claimed and prior art products are identical or substantially identical in composition – which is the case here in relation to Reck (and Hummerich) and the claims at issue -- a *prima facie* case of either anticipation or obviousness has been established. *In re Best*, 562 F.2d at 1255, 195 USPQ at 433. This is what the Examiner has established in this case.

When the PTO shows a sound basis for believing that the applicants' invention and the prior art are the same compositionally, the applicant has the burden of showing with factual evidence that they are not. M.P.E.P. 2112.01(I) citing *In re Spada*, 911 F.2d 705, 709, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). Therefore, the *prima facie* case must be rebutted by factual evidence – not simply attorney argument -- showing that the prior art products do not necessarily possess the characteristics of the claimed product.

M.P.E.P. 2112.01(I) citing *In re Best*, 562 F.2d at 1255, 195 USPQ at 433. Also consider the discussion in M.P.E.P. 2112.01(I) about *Titanium Metals Corp. v. Banner*, 778 F.2d 775, 227 USPQ 773 (Fed. Cir. 1985):

[*Titanium Metals*'] [c]laims were directed to a titanium alloy containing 0.2-0.4% Mo and 0.6-0.9% Ni having corrosion resistance. A Russian article disclosed a titanium alloy containing 0.25% Mo and 0.75% Ni but was silent as to corrosion

resistance. The Federal Circuit held that the claim was anticipated because the percentages of Mo and Ni were squarely within the claimed ranges. The court went on to say that it was immaterial what properties the alloys had or who discovered the properties because the composition is the same and thus must necessarily exhibit the properties. M.P.E.P. 2112.01(I)

This is precisely the situation in this case. The claimed composition is disclosed in the prior Hummerich and Reck art, and the property – surface tension – is the necessary result. Any patent issuing with these claims would be contrary to the M.P.E.P. and the cases cited above.

d. The Missing Factual Evidence

Thus, to demonstrate a lack of inherency Owens Corning is required to present proof with factual evidence, not attorney argument alone. Owens Corning surely realizes that the Examiner does not have laboratory facilities with which to re-create the binders in Reck, Hummerich and other cited art to ascertain whether the surfactant levels recommended in the art inherently achieve the “low” viscosities claimed by Owens Corning. Owens Corning, one the other hand, is a large company with such facilities. The Examiner is permitted under 37 C.F.R. § 1.105 to make requests of patent applicants for information relating to patentability. The Examiner should avail herself of the procedure under 37 C.F.R. § 1.105 and request Owens Corning to perform a fair re-creation of the prior art binders in the cited patents over the range of recommended surfactant levels to ascertain what the art inherently teaches one skilled in this art.

In that regard, if the invention here is simply a binder with a viscosity lower than equivalent weight percent “phenolic binders,” Owens Corning should have provided a more expansive disclosure of the viscosities of various of the “equivalent” phenolic binders set forth in the art so that we could have compared what Reck and Hummerich are really teaching one skilled in the art in relation to surfactant addition. We should not be evaluating that teaching against any arbitrary numerical levels provided by Owens Corning.

For the purposes of ascertaining obviousness, for example, we need to understand what unexpected results might be achieved in reaching any particular numerical level, and compare those results against what the art inherently teaches and suggests. The only

way to do that is for Owens Corning to provide factual evidence, which they have failed to do in relation to the cited art.

e. The "Facts" Owens Corning Currently Relies On Are Irrelevant

The only two "factual" comparisons Owens Corning has provided to date are irrelevant to patentability over the cited art: (1) the comparison between the polycarboxy binder with and without surfactant (see specification pp. 8-10) is irrelevant because the art discloses such binders with and without surfactant; and (2) the comparison (specification p. 8, Table 1) between a "phenolic binder" and the polycarboxy binder is irrelevant because the Examiner is not yet basing her rejections on the phenolic binder art. These comparisons also certainly do not establish patentability with regard to any particular baseline – whether numerical or with reference to any "phenolic binder."

III. The Section 102(f) Rejection Should Be Withdrawn

As the Examiner appreciates, this case was filed because Rohm and Haas believes that inventorship was incorrectly named in the parent application (U.S. Patent Application Publication 2002/0188055) to which this Application claims priority. To be clear, in this application, we have named Rohm and Haas' Richard Dobrowolski as a co-inventor with the Owens Corning inventors (Chen et al.) named on the parent application (see, e.g., the cover page to our application). If we are factually correct about co-inventorship, then no Section 102(f) rejection should be made in this case. Alternatively, if a section 102(f) rejection is proper under these circumstances, then both this case and its parent should be rejected on that ground. The only way that the factual correctness of our position can be determined is through an interference, which would identify which case should be properly rejected under Section 102(f).

So our position is clear, we request an interference with the parent application in the event that the Examiner finds subject matter patentable in this application or its parent. We currently propose claim 1 (in both cases as they are identical claims) as the count, and maintain that all the remaining claims correspond to the count as they represent the same patentable invention, in the event that any of the claims are later found patentable. Support for the amendments to claim 1 is found at least on page 2, lines 21-26 and Example 1 at page 7, line 20 – page 8, line 9, which is where, among other places,

the specification provides a constructive reduction to practice. In short, we have in this section complied with the provisions of 37 C.F.R. §41.202 to suggest an interference to the Examiner. However, we suggest that an interference be declared only in the event that patentable subject matter is found by the Examiner. In the event that Owens Corning makes further amendments, we reserve the right to suggest a different count.

**IV. Conclusion**

Absent anything other than attorney argument, the Examiner should maintain her art rejections given what the art expressly and inherently teaches and given the requirements of the M.P.E.P and the holdings of the cases above. The Examiner has established a *prima facie* case that the art inherently anticipates the claims at issue according to the M.P.E.P. and the legal authorities cited therein. The Examiner should consider a Section 112 indefiniteness rejection of the offending claims in both cases in the next office actions. The Section 102(f) rejection should be withdrawn, or made in both cases. An interference should be declared if the Examiner finds the current claims patentable.

We thank the Examiner in advance for her consideration of our arguments.

Respectfully submitted,



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